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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,255	10/14/2003	J. Patrick Droppleman	30552/38910	4010

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EXAMINER

GARCIA, ERNESTO

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/685,255

Applicant(s)

DROPPLEMAN, J. PATRICK

Examiner

Ernesto Garcia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 3,4,8,10,12,16,17,21,22,25,30,32,35,36 and 39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-7,9,11,13-15,18-20,23,24,26-29,31,33,34,37 and 38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) ☒ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application (PTO-152) |
| 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/26/04</u> . | 6) ☐ Other: _____ |

DETAILED ACTION

Election

This application contains claims directed to the following patentably distinct species of the claimed invention:

- | | |
|------------------------|---------------|
| I. Figures 1-6 and 13. | II. Figure 12 |
| III. Figure 14 | IV. Figure 15 |
| V. Figure 16 | VI. Figure 17 |

Figures 7-11 are subspecies of the components in species I.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1 and 14 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

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Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

During a telephone conversation with Mr. Roger A. Heppermann on January 26, 2005 a provisional election was made with oral traverse to prosecute the invention of species I, claims 1, 2, 5-7, 9, 11, 13-15, 18-20, 23, 24, 26-29, 31, 33, 34, 37 and 38. Applicant in replying to this Office action must make affirmation of this election. Claims 3, 4, 8, 10, 12, 16, 17, 21, 22, 25, 30, 32, 35, 36 and 39 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "20" has been used to designate a connector with a first configuration (Fig. 1), a connector with a second configuration (Fig. 2), a connector with a third configuration (Fig. 12), a connector with a fourth configuration (Fig. 13), a connector with a fifth configuration (Fig. 14), a connector with a sixth configuration (Fig. 15), and a connector with a seventh configuration (Fig. 16), and a connector with a eighth configuration (Fig. 17).

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "24" has been used to designate a female portion without a flange (Figure 1), a female portion with a flange at the bottom and groove on top (Fig. 2), a female portion with a seal 78c (Fig. 9), a female portion with a seal 78d (Fig. 10) a female portion with a notch on surface 68 (Fig. 11), a female portion with a tapered surface and ridges 60 (Fig. 12), a female portion having a different configuration (Fig. 14), a female portion having threads 88 (Figure 15), a female portion having a different configuration (Figure 16), and a female portion having another configuration (Fig. 17).

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "22" has been used to designate a male portion without a flange (Figure 1), a male portion with a flange at the top (Fig. 2), a male portion with a

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seal 78a (Fig. 7), a male portion with a seal 78b (Fig. 8), a male portion with a tapered surface and ridges 34 (Fig. 12), a male portion having a hollow passage (Fig. 13), a male portion having a sleeve 84 (Fig. 14), a male portion having external threads 88 (Figure 15), a male portion having a different configuration (Figure 16), and a male portion having another configuration (Fig. 17).

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "34" has been used to designate both a mating surface without ridges 34 and a mating surface with ridges (Fig. 12).

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "68" has been used to designate both a lug surface being parallel to surface 60 (Fig. 4) and a lug surface being slanted (Fig. 11).

The drawings are objected to because reference characters 22, 24 and 54 are misleading. For instance, reference character 22 in Figure 1 points to the outside of the locking member 30 and depicts a male portion. In Figures 3, 7, 8, 16 and 17, reference character 22 appears to depict a male portion due to the arrow. The same problem occurs in reference character 24 and 54. Reference character 54 in Figure 4 points in the wrong place as compared in Figure 1. Reference character 26 in Figure 3 points to an edge when it should point to the base as shown in Figure 1.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the distance between the upper and lower lug surfaces and the distance between the lower surface of the lugs and the mating surface of the first portion or the second portion (claim 26), and the distance between the first and a second lug surface of the cavity (claim 27) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: the detail description fails to mention which one is the first portion and the second portion as recited by claim 1 in lines 2 and 5. Appropriate correction is required.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "the distance between the upper and lower surfaces changes from less than to greater than the distance between the lower surface of the lugs and the mating surface of the first portion or the second portion" recited in claim 26, and the limitations in claims 27 and 28 are not recited in the specification.

Claim Objections

Claims 6, 19 and 26 are objected to because of the following informalities:

regarding claims 6 and 19, it is unclear what the range is supposed to be or what the units; and,

regarding claim 26, "lug" in line 3 should be --lugs--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5-7, 9, 11, 14, 15, 18-20, 23, 24, 26-29, 31, 33, 34, 37 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Hogue et al., 6,267,418 (see marked-up attachment).

Regarding claim 1, Hogue et al. disclose, in Figure 10, a connector comprising a first portion **130** and a second portion **100**. The first portion **130** includes a base **A2** having a mating surface **A3**. The first locking member **152** has one or more outwardly protruding lugs **150** and a guide rod **148**. The guide rod **148** has an outer diameter **A7**. The second portion **100** includes a base **122**, a second locking member **110**, and a bore **A14**. The base **122** has a mating surface **A10** and a first cavity **124**. Applicant is reminded that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

Regarding claim 2, the lugs **150** have a generally oval locking shape.

Regarding claim 5, an outer diameter of the guide rod **148** and an inner diameter of the bore **A14** are tightly toleranced.

Regarding claim 6, a gap and a tolerance between the outer diameter of the guide rod **148** and the inner diameter of the bore **A14** is in the range of $0.0005^{+}.002-.0$ ".

Regarding claim 7 the connector further includes a passageway **156** disposed in the guide rod **148**.

Regarding claim 9, the lugs **150** includes a lower surface **154** and an upper surface **A17**.

Regarding claim 11, the upper surface **A17** is parallel to mating surface **A3** of the first portion **130** and the lower surface **154** has a semi-spiral shape.

Regarding claim 14, Hogue et al. disclose, in Figure 4, a connector comprising a first portion **130** and a second portion **100**. The first portion **130** has a base **A2**, a first locking member **152**, and a guide rod **148**. The first locking member **152** is located along the guide rod **148**. The base **A2** includes a mating surface **A10**. The first locking member **152** includes outwardly protruding lugs **150** having an upper surface **A17** and a lower surface **154**. The lugs **150** combine to create a locking shape. The guide rod **148**

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has a first end **A18**, a second end **A19**, and an outer diameter **A7**. The second portion **100** has a base **122**, a bore **A14**, and a second locking member **110**. The second locking member **110** is located along the bore **A14**. The base **122** of the second portion **100** includes a mating surface **A10** and an aperture **124**. The second locking member **110** includes a cavity **114** and a first lug surface **120**. The bore **A14** has a first end **A23**, a second end **A24** and an inner diameter **A25**. The first lug surface **120** of the second locking member **110** or the lower surface **154** is angled.

Regarding claim 15, the locking shape is oval.

Regarding claim 18, a gap between the outer diameter **A7** of the guide rod **148** and the inner diameter **A25** of the bore **A14** is tightly toleranced.

Regarding claim 19, the gap and the tolerance is in the range of $.0005^{+}.0002-.0000$ "

Regarding claim 20, the connector further includes a passageway **156** deposited in the guide rod **148**.

Regarding claim 23, the first portion **130** and the second portion **100** have a contiguous exterior surface **A100**.

Regarding claim 24, the lugs **150** extend from the guide rod **148**.

Regarding claim 26, a distance between the upper surface **A17** and the lower surface **154** of the lugs **150** changes from less than to greater than a distance between the lower surface of the lugs and the mating surface of the first portion or the second portion.

Regarding claim 27, a distance between the upper surface **A17** and the lower surface **154** of the lugs **150** changes from less than to greater than, a distance between the first lug surface **120** and a second lug surface **116** of the cavity **114**.

Regarding claim 28, a distance between the upper surface **A17** and the lower surface **154** of the lugs **150** changes from the distance between the upper surface **A17** and the lower surface **154** of the lugs **150**.

Regarding claim 29, given the structure of Hogue et al. the method of operation for a connector is inherently performed. Therefore, the method comprises:

provide a first portion, including a base having a mating surface, a first locking member having a plurality of outwardly protruding lugs, the lugs combining to create a locking shape, and a guide rod having an outer diameter,

provide a second portion including a base having a mating surface and an aperture, a second locking member having a cavity, and a bore;

inserting the guide rod into the bore for alignment of the first and second portions relative to each other;

align the locking shape with the aperture;

insert the lugs into the cavity; and,

engage the first and second locking members by rotating the first portion with respect to the second portion.

Regarding claim 31, the method further includes rotate the locking shape relative to the aperture.

Regarding claim 33, Hogue et al. disclose a method comprising:

create a first portion including a base having a mating surface, a first locking member having one or more outwardly protruding lugs, the one or more lugs having a locking shape, and a guide rod having an outer diameter; and,

create a second portion including a base having a mating surface and a first cavity, a second locking member including a second cavity, and a bore, wherein bore is adapted to receive the guide rod, and the cavity of the second member is adapted to receive the first locking member so that the base of the first portion and the base of the second portion are forced together during rotation of the first and second portions relative to each other when the first locking member is disposed in the cavity.

Regarding claim 34, the method further includes the step of making the locking shape oval.

Regarding claim 37, the method further includes tightly tolerancing a gap between the outer diameter of the guide rod **148** and an inner diameter of the bore **A14**.

Regarding claim 38, the method further includes the step of creating a passageway **156** in the guide rod **148**.

Claims 1 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Kennedy, 2,111,859 (see marked-up attachment).

Regarding claim 1, Hogue et al. disclose, in Figure 10, a connector comprising a first portion **A1** and a second portion **A8**. The first portion **A1** includes a base **18** having a mating surface **A3**. The first locking member **A4** has one or more outwardly protruding lugs **20** and a guide rod **A6**. The guide rod **A6** has an outer diameter **A7**. The second portion **A8** includes a base **12**, a second locking member **5**, and a bore **A14**. The base **12** has a mating surface **A10** and a first cavity **A11**. Applicant is reminded that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

Regarding claim 13, the connector further includes an exterior surface **A100** on the base **18** of the first portion **A1** and an **A100** on the base **12** of the second portion **A8**. The exterior surface **A100** on the base **18** of the first portion **A1** is contiguous with the exterior surface **A100** on the base **12** of the second portion **A8**.

Conclusion

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Falat et al., 6,254,303, Greve, 1,130,726, Harms, 3,876,234, Cooksey, 4,986,690, and Moyle, 692,795 show a similar connector.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 703-308-8606. The examiner can normally be reached from 9:30-6:00. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 703-308-2686. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EL

Daniel P Stodola

E.G.

January 27, 2005

DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

Attachment: one marked-up page of Hogue et al., 6,267,418; and,
one marked-up page of Kennedy, 2,111,859.

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Hogue et al., 6,267,418

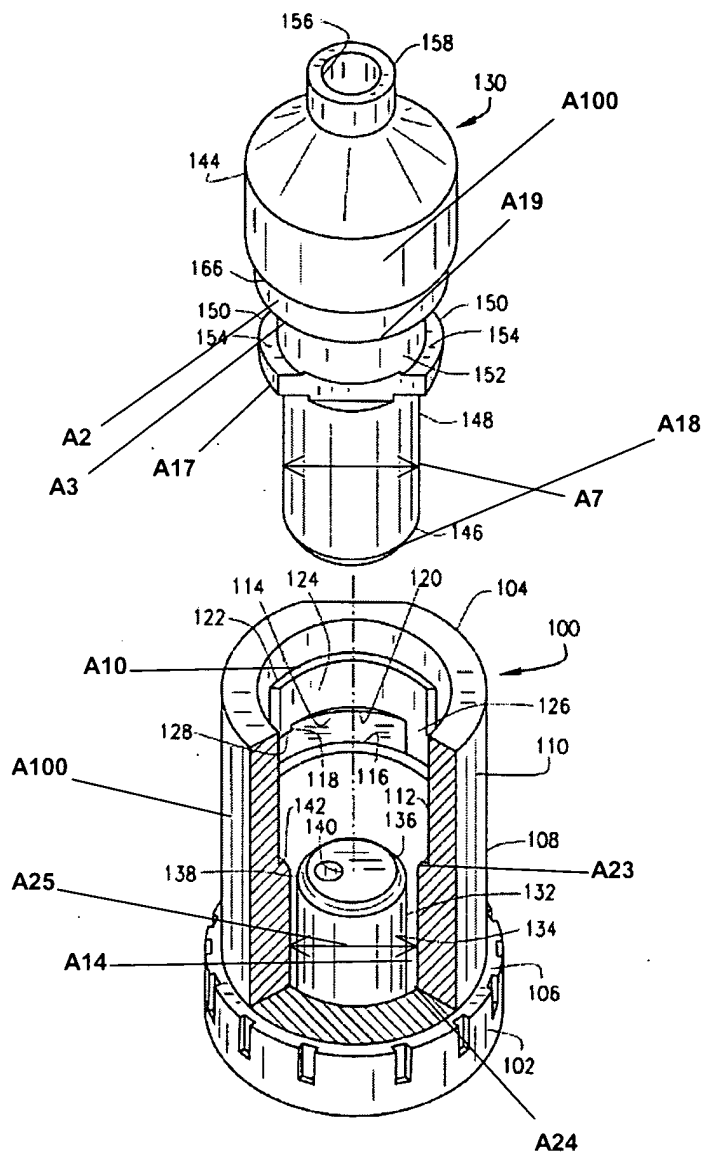


FIG. 4

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Kennedy, 2,111,859

